FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

DUPLICATE COPY

Date of Report: December 11, 1995 Date Received: November 30, 1995

Project: Metro Self Monitor, PO #M51487 Date Samples Extracted: December 6, 1995 Date Extracts Analyzed: December 7, 1995

RESULTS FROM THE ANALYSIS OF THE PROCESS WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL AND ZINC

Samples Processed Using Method 3005 Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
M51487	0.82	0.52	0.45	0.10
Method Blank	<0.05	<0.05	< 0.05	<0.05

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QUALITY ASSURANCE RESULTS FOR CHROMIUM, COPPER, NICKEL AND ZINC

Laboratory Code: 64398 (Duplicate)

	Reporting	Sample	Duplicat		Acceptance
Analyte:	<u>Units</u>	Result	Result	Difference	<u>Criteria</u>
Chromium	mg/L (ppm)	0.82	0.76	8	0-20
Copper	mg/L (ppm)	0.52	0.46	12	0-20
Nickel	mg/L (ppm)	0.45	0.38	17	0-20
Zinc	mg/L (ppm)	0.10	0.09	11	0-20

Laboratory Code: 64398 (Matrix Spike)

	Reporting	Spike	Sample	% R	ecovery	Acceptance	Relative Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)		0.82	95	95	80-120	0
Copper	mg/L (ppm)		0.52	87	89	80-120	2
Nickel	mg/L (ppm)		0.45	96	94	80-120	2
Zinc	mg/L (ppm)	5	0.10	98	98	80-120	0

Laboratory Code: Spike Blank

	Reporting	Spike	% Recovery	Acceptance
Analyte:	Units	Level	MS	Criteria
Chromium	mg/L (ppm)	5	102	80-120
Copper	mg/L (ppm)	5	96	80-120
Nickel	mg/L (ppm)	10	101	80-120
Zinc	mg/L (ppm)	5	103	80-120

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ENVIRONMENTAL CHEMISTS

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

December 11, 1995

Gerry Thompson, Project Leader Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed is a duplicate copy of the report from the testing of material submitted on November 30, 1995 from your Metro Self Monitor, PO #M51487 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

keh Enclosures FAX: 382-7335 ACU1211R.DOC